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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,309	03/01/2002	Jackson Luk Wah Chu	P-370.241	2057

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EXAMINER

COLON, GERMAN

ART UNIT

PAPER NUMBER

2879

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,309

Applicant(s)

CHU, JACKSON LUK WAH

Examiner

German Colón

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Blockson (US 3,161,974).

Regarding claim 1, Blockson discloses an EL lighting device comprising an elongated flexible body (see Fig. 3) having an inner part and an outer part, an elongated multi-layer EL element (see Fig. 2) including a pair of co-extending conductive regions 14 and extending along the inner body part, a pair of elongated conductors 21 (or 35, 36) extending along the inner body part for supplying electrical power to the EL element, said conductors being separated from the EL element by at least a portion of the inner body (see Col. 2, lines 42-44), and a plurality of flexible contact elements 15 (or 38, 39) located at intervals along the inner body part for electrically connecting the conductive regions of the EL element to the conductors, each said contact element having a first part in contact with a respective said conductive region and a

Art Unit: 2879

second part extending through said portion of the inner body part and contacting a respective conductor (see Figs. 3 and 5 connected to element of Fig. 2).

Regarding claim 2, Blockson discloses the EL element being supported by the inner body part.

Regarding claim 3, Blockson discloses the inner body part being formed with a channel holding the EL element therein (see Fig. 3 once assembled with Fig. 2).

Referring to claim 4, Blockson discloses the channel having an open side having a reduced width which is smaller than the width of the EL element (see Figs. 3 and 5 and Col. 2, lines 62-71).

Referring to claim 5, Blockson discloses the EL element having a flat cross-section and opposite edges, along which edges the conductive regions extend (see Fig. 1 and Fig. 4).

Referring to claim 6, Blockson discloses the conductors being embedded within the inner body part (see Col. 2, lines 43-44).

Regarding claim 8, Blockson discloses the contact elements **38,39** being formed being resilient.

Regarding claim 10, Blockson discloses at least some of the contact elements being formed of metalwire **15**.

Referring to claim 14, Blockson discloses cutting a plurality of access cavities **16** in the inner body part (see Col. 2, lines 36-37) to expose a portion of each elongated conductor and said conductive regions, further attaching wire **15** to each exposed portion.

Art Unit: 2879

4. Claims 18, 21, 22 and 24-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Gustafson et al. (US 5,496,427).

Regarding claim 18, Gustafson discloses an EL lighting device comprising:

an elongated flexible body of light transmissive material (see Fig. 2),

an elongated multi-layer EL element extending along and within the body and including a pair of co-extensive elongate conductive regions **22,28**,

a pair of elongated conductors **30,32** extending along and within the body for supplying electrical power to the EL element, and

wherein each elongate conductor provides electrical power to the EL element via a respective one of said conductive regions throughout the length of the EL lighting device.

Regarding claim 21, Gustafson discloses each elongate conductor being in direct contact with a respective said conductive region (see Figs. 2 and 3)

Referring to claim 22, Gustafson discloses the device being formed as a co-extrusion, wherein the body, EL strip and elongate conductors are extruded (see Col. 4, lines 44-45 and 62-63).

Referring to claim 24, Gustafson discloses the EL element having a flat cross-section and opposite edges, along which edges the conductive regions extend respectively in a continuous manner (see Figs. 2 and 3).

Referring to claim 25, Gustafson discloses the conductors being provided by respective metal strips of rectangular cross-section (see Col. 3, lines 66).

Regarding claim 26, Gustafson discloses the metal strips being made of copper (see Col. 3, lines 66).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blockson (US 3,161,974) in view of Gustafson et al. (US 5,496,427).

Blockson discloses the conductors being bus bars, but is silent regarding the limitation of said conductors being metal wires.

However, in the same field of endeavor, Gustafson discloses a bus bar and teaches rectangular cross-section bars, conventional wires and other elongate conductors as art recognized equivalent materials used as bus bars (see Col. 3, lines 65-67 and Col. 4, lines 1-2). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bus bar disclosed by Blockson, made of a metal wire, as disclosed by Gustafson, since Gustafson teaches a metal wire as a suitable material for a bus bar.

7. Claims 19, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gustafson (US 5,496,427) in view of Bezner (US 4,855,190).

Regarding claim 19, Gustafson discloses the claimed invention except for the limitation of "the elongated conductors being attached to a respective conductive region by electrically conductive glue".

However, in the same field of endeavor, Bezner discloses an EL lighting device wherein a conductor is attached to a conductive region of the EL element using a conductive glue in order to simplify electrical connection to the EL element, providing a good adhesion and electrical contact (see Col. 4, lines 24-31). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a conductive glue to attach the elongate conductors to a respective conductive region of the EL element with the purpose of simplifying electrical connection to the EL element, providing a good adhesion and electrical contact.

Referring to claim 20, Gustafson-Bezner discloses the conductive glue being flexible (see Col. 4, lines 24-31 of '190).

Referring to claim 23, Gustafson-Bezner discloses the glue being co-extruded with the device (see Col. 4, line 30 of '190, in view of Figs. 2 and 3 of '427 and Col. 4, lines 44-45 and 62-63).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Art Unit: 2879

9. Claims 1-17 and 27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 6,527,401. Although the conflicting claims are not identical, they are not patentably distinct from each for the following reasons:

US Application SN 10/087,309	US Patent No. 6,527,401	Reasons for rejecting under 35 U.S.C. 101 double patenting
Claim 1	Claim 1	<p>Same subject matter. Patent '401 claims an electroluminescent lighting device comprising an elongate flexible body having an inner part and an outer part, said outer part being of a transparent or translucent material, an elongate multi-layer electroluminescent element including a pair of co-extending conductive regions and extending along the inner body part, a pair of elongate conductors extending along the inner body part for supplying electrical power to the electroluminescent element, said conductors being separated from the electroluminescent element by at least a portion of the inner body part, and a plurality of flexible contact elements located at intervals along the inner body part for electrically connecting the conductive regions of the electroluminescent element to the conductors, each said contact element having a first part in contact with a respective said conductive region and a second part extending through said portion of the inner body part and contacting a respective said conductor. Patent '401 is silent regarding the limitation of the outer part being light-transmissive.</p> <p>However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the transparent outer part of a light-transmissive material in order to allow the emission of light from the EL element.</p>
Claim 2	Claim 2	Patent '401 claims the electroluminescent element being supported by the inner body part.

Claim 3	Claim 3	Patent '401 claims the inner body part being formed with a channel holding the electroluminescent element therein.
Claim 4	Claim 4	Patent '401 claims the channel has an open side having a reduced width which is smaller than the width of the electroluminescent element.
Claim 5	Claim 5	Patent '401 claims the electroluminescent element having a flat cross-section and opposite edges, along which edges the conductive regions extend respectively in a continuous manner.
Claim 6	Claim 6	Patent '401 claims the conductors being embedded within the inner body part.
Claim 7	Claim 7	Patent '401 claims the conductors being provided by respective stranded metal wires.
Claim 8	Claim 8	Patent '401 claims the flexible contact elements being formed as a conductive resilient insert.
Claim 9	Claim 9	Patent '401 claims at least some of the inserts being of conductive rubber.
Claim 10	Claim 10	Patent '401 claims at least some of the flexible contact elements being formed of metalwire.
Claim 11	Claim 11	Patent '401 claims the wires being soldered to the elongate conductors.
Claim 12	Claim 12	Patent '401 claims the wires being clipped through the conductive regions of the electroluminescent element.
Claim 13	Claim 13	Patent '401 claims a method of forming the electroluminescent lighting device of claim 1, the method comprising: cutting a plurality of access cavities in the inner body part, inserting a conductive rubber piece into each cavity to come into contact with one of said elongate conductors and installing the electroluminescent element into the inner body part so that each of said elongate conductors and one of said conductive regions of the electroluminescent element comes into contact with one or more of said conductive rubber pieces.
Claim 14	Claim 15	Patent '401 claims a method of forming the electroluminescent lighting device of claim 1, the method comprising: taking the inner body part and cutting a plurality

Art Unit: 2879

		of access cavities therein to expose portions of each elongate conductor and said conductive regions, the method further comprising attaching respective pieces of flexible wire to each exposed portion of each elongate conductor and attaching each piece of flexible wire to a corresponding exposed portion of the respective conductive region.
Claim 15	Claim 16	Patent '401 claims the pieces of flexible wire being soldered to each said exposed portion of each elongate conductor.
Claim 16	Claim 17	Patent '401 claims each piece of flexible wire being soldered to a clip that is clipped through said corresponding exposed portions of the respective conductive region
Claim 17	Claim 14	Patent '401 claims the outer body part being extruded onto the inner body part to form the complete electroluminescent lighting device.
Claim 27	Claim 12	<p>Patent '401 claims the limitations of claim 27 of the instant application, except for the limitation of "further comprising a third elongate conductor in contact with the EL element".</p> <p>However, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a third elongate conductor in contact with the EL element, since mere duplication of essential parts of the invention is considered within the skill of the art.</p>

Art Unit: 2879

Prior Art of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hirotsuka et al., in US 5,013,967, discloses an EL lamp having elongated conductors in contact with the EL element.

Whitney, in US 3,317,722, discloses an EL lamp comprising a flexible body.

Chien, in US 5,667,394, discloses an EL strip comprising conductive rubber connectors.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to German Colón whose telephone number is 703-305-5987. The examiner can normally be reached on Monday thru Friday, from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 703-305-4794. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7382 for regular communications and 703-308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.


gc

June 16, 2003



Kenneth J. Ramsey
Primary Examiner